INTEROPERABILITY IN VIRGINIA

Volume 2 Issue 1 | Office of Commonwealth Preparedness | Winter 2007

CICO Corner
By Chris Essid

I am pleased to report the Virginia interoperability effort ended FY 2006 with significant accomplishments, which could not have been achieved without the input and expertise of the public safety practitioners. Some of the accomplishments include the creation and distribution of targeted materials to expand our stakeholder base, the identification and endorsement of a statewide common language best practice, and the creation of a technical standards library. In addition, the Advisory Group and State Interoperability Executive Committee created the current FY 2007 Plan, which includes 14 Initiatives slated to be accomplished this year. The Strategic Plan is now available for download from the Interoperability in Virginia website or may be requested in hard copy from my office.

The CICO recently redesigned the Interoperability in Virginia website (note the new web address): www.interoperability.virginia.gov. The new website has over 70 pages of interoperable communications information. If you would like to add anything to the website please contact the office at (804) 692-0137.

The 2006 Virginia Interoperable Communications Conference was a huge success with nearly 350 people in attendance. I offer a special thanks to all of our sponsors and presenters for a great conference and thank those who attended. It would not have been a success without your participation. Several of the conference presentations are available for download from our website in the Library.

Chris Essid
Commonwealth Interoperability Coordinator

Inside This Issue

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Practitioner Spotlight: Chief Charles Werner

Chief Charles Werner is a 28-year veteran of the Charlottesville Fire Department and presently serves as its Fire Chief. He is certified both as Chief Fire Officer Designation and National Fire Academy Executive Fire Officer. He presently serves as Chair of Virginia's Statewide Interoperability Executive Committee and as a member of the International Association of Fire Chief's Communications Committee. Chief Werner is a technology advocate and presently serves on numerous local, state and national interoperability working groups. He also serves on the national SAFECOM Executive Committee and the DMIS Working Group.

Each Newsletter will feature a Public Safety Practitioner that has had an impact on Virginia Interoperability. For this newsletter we interviewed Chief Charles Werner, the FY 2007 Chair of the State Interoperability Executive Committee, and this is what he had to say:

In your opinion, what is the biggest interoperability challenge in Virginia?

Achieving cooperation and collaboration across disciplines and statewide.

What prepared you for your position as Executive Committee Chair?

I have been fortunate to enjoy many positive relationships with many of my public safety peers. I think the knowledge that I have gained from these relationships and friendships prepared me the most to serve as the SIEC Chair. Additionally, this is the second time around for me as Chair so I have a good understanding of what is expected. I would also like to point out that no one person could do this job adequately without the excellent support from Chris Essid, Melissa McMenemy, the Project Management Office staff and the members of the SIEC. I would also have to mention my role on the SAFECOM Executive Committee and friend-mentors such as Alan Caldwell, Harlin McEwen, Marilyn Ward, Bob Gurss, Marilyn Praisner, John Powell and Dr. David Boyd.

What prepared you for your job?

My experiences throughout my career along with some great mentors who were willing to share their knowledge and provide opportunities that allowed me to continually learn and grow. And that I was wise enough to listen.

What is the biggest lesson you have learned from your job?

That everything we do and our ultimate success are based on relationships. When you establish solid friendships across disciplines, it changes the way everything works - better - interdependent. I hope that this message challenges others to diligently reach out to their respective counterparts in the other areas of public safety.

If you weren't doing what you are doing, what would you want to do?

That's a tough one. I believe that I would enjoy law enforcement - I really have the utmost respect for police officers and the work that they do. That has been reinforced as I have met so many law enforcement officers through this experience that have become my dearest friends (You know who you are).

I'd also like to thank Alexandria Police Captain Eddie Reyes for his national leadership in the area of interoperability, for serving last year as Virginia's SIEC Chair AND for his friendship.

Pushing Progress: PMO Update

PMO Support

The CICO Project Management Office kicked off the year with an open competition of the PMO support contract. SRA International's Touchstone Consulting Group (Touchstone) was awarded the contract and began work in August 2006.

Conference & Outcomes

The Virginia Interoperable Communications Conference was held October 3-4 in Portsmouth attracting over 300 participants. This year's conference focused heavily on bringing to bear a renewed emphasis on regionalism and broad interoperability solutions. It also introduced and promoted the products of the FY 06 Strategic Plan for Statewide Communications Interoperability, and gained public safety and emergency responders input and support for the initiatives in the FY 07 Strategic Plan for Statewide Communications Interoperability.

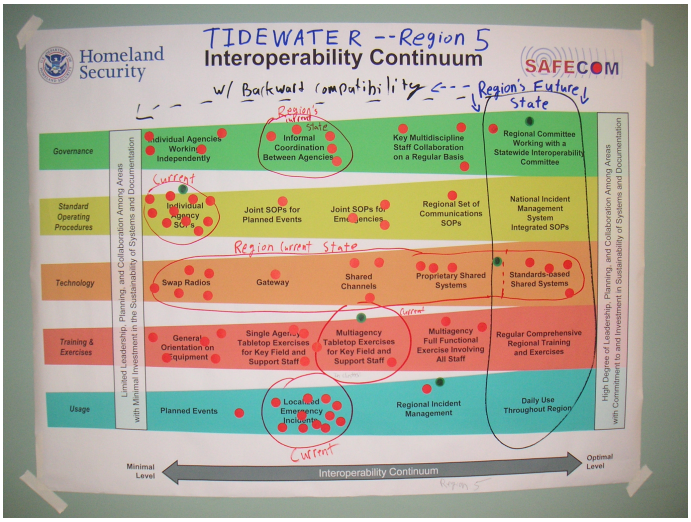
The conference provided information and gathered knowledge from public safety practitioners, communications officials, emergency responders, and homeland security officials. The conference featured interactive working sessions in which practitioners used their expertise to help the Commonwealth overcome interoperability challenges.

Chris Essid introduces the Federal Perspective Panel. (l-r: Mr. Chris Essid, Dr. David Boyd, Councilmember Marilyn Praisner, Mr. Joe Heaps, and Mr. Han Hawkins

To close the conference, attendees participated in regional break-out sessions where they divided into their Virginia Homeland Security Planning Region to discuss region specific challenges and the current status of interoperability in the region. These seven regions, which are also the Virginia State Police Districts, have been recognized by Governor Kaine as the construct for planning for homeland security. Bringing practitioners together on a regional basis addressed the need for states to plan on a regional basis to comply with new federal grant requirements and aid in the identification of gaps and challenges.

For more information on the regional effort, please contact CICO@governor.virginia.gov.

(*Pushing Progress continued on p. 4 & 6)*



The Tidewater current and future state of interoperability as identified by the participants in the regional break-out session.

Federal Report

Policy Academies
The SAFECOM program is sponsoring a series of Policy Academies and conferences over the next year to assist state and local practitioners and policy makers become more knowledgeable about the need for interoperability and to assist in planning for interoperability on a statewide basis.

The first of four Policy Academies with the National Association of Counties (NACo) was held on October 12, 2006 in conjunction with the Mid Atlantic All Hazards Forum in Baltimore, MD. The audience consisted of elected officials and professional staff of Mid-Atlantic counties. The meeting consisted of an overview of the increasing importance of interoperability and the important role local practitioners and officials play in achieving it. Topics such as the new DHS requirement for statewide interoperability plans, how local officials and practitioners can become involved in statewide interoperability planning, and funding strategies were addressed. Speakers included Chris Essid, State Interoperability Coordinator for the Commonwealth of Virginia on Statewide Planning and Major Dean Hairston of the Danville, Virginia Fire Department on funding strategies.

Additional Policy Academies are planned with the National Governors Association (NGA). NGA selected five initial states (Montana, Alabama, Washington, Indiana, and Minnesota) for the first series of meetings and will select five additional states in 2007 for the second series of meetings. The NGA Policy Academies will assist the state teams in developing statewide plans with technical assistance provided by NGA. Each state will send a team of state and local practitioners and policy makers to participate in the Policy Academy. A representative of the Governors office is required to attend.

In addition to the Policy Academies, SAFECOM is sponsoring a Statewide Planning Workshop with NGA in March, 2007 to which each state, territory and the District of Columbia will send a five-member team of state and local representatives to work on their statewide plan due by December 2007. This hands-on workshop will assist statewide teams in incorporating state and local perspectives within a planning process and in producing a plan in accordance with the statewide planning criteria to be released this month by SAFECOM.

Criteria for Statewide Strategic Plans on Interoperability
The SAFECOM program is in the process of drafting criteria for Statewide Strategic Plans focusing on interoperability. SAFECOM is working with state and local executives to develop the criteria. Virginia's Interoperability Coordinator, Chris Essid, participated in the panel providing input on the criteria.

The requirements are expected to be unveiled by SAFECOM late October or early November. Please check the Interoperability in Virginia website for more information.

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800 MHz Rebanding Update

One of the initiatives in the FY07 Strategic Plan calls for continued support and facilitation of the 800 MHz rebanding effort within the Commonwealth. The SIEC is working with the Virginia Information Technologies Agency (VITA) on 800 MHz rebanding and has hired CTA Communications to conduct an analysis of the state on a regional basis to determine where Virginia is and what steps still need to be taken.

Events Calendar

The 2007 Regular Session of the General Assembly convenes on Wednesday, January 10, 2007.
http://legis.state.va.us/

2007 VACP Mid-Year Conference
2007 Mid-year Conference
February 5-6, 2007
http://www.vachiefs.org/vacp/vacp_conferences.html

Common Nomenclature
National Public Safety Telecommunications Council
February, 5, 2007
Orlando, Florida
npstc@highlands-group.com

2007 APCO/NENA Winter Conference
Wednesday-Thursday, January 24-25, 2007
Henrico County Training Center
www.virginia-apco.org

Local Spotlight: Piedmont Regional Interoperability Project

By Major Dean Hairston, City of Danville Police Department

The City of Danville is approximately 44 square miles and is located in the southern most portion of Central Virginia, bordering the State of North Carolina. It is surrounded on three sides by Pittsylvania County, Virginia, which incorporates 1000 square miles. Just across the border lies Caswell County, North Carolina. Even though we share a common geographic border, we currently lack a common communication system that allows for interoperability.

Sharing a common border among the jurisdictions creates a number of challenging issues. Criminal and traffic offenders alike flee law enforcement by crossing back and forth across the state line in an attempt to elude capture, resulting in a higher than normal number of high speed chases. During emergency events involving multiple agencies, a lack of radio interoperability is at best problematic. Pursuing units are relegated to utilizing a system of relayed messages conveyed via their respective agency's emergency operations centers through the use of landlines. The inability of field responders to communicate directly with each other wastes time and adds unnecessary delay in situations were every second counts.

Historically antiquated patterns of thinking led to investments in proprietary, non-interoperability technology. Many of the information and communication systems within the PRIP area are incompatible with one another. This condition has led to a crisis in public safety operations. In order to maximize limited resources, the region moves toward standards-based technology that seeks to create inoperability through simple system modification, instead of system replacement. While radio upgrades may be necessary on very old networks, it is not economically feasibility to upgrade relatively new LMR (Land Mobile Radio) radio networks in order to achieve radio interoperability.

A number of solutions were initially brainstormed including the deployment of voted voice repeaters within neighboring jurisdictions. What was needed was a flexible, dynamic, and secure communication solution that would allow for real-time information sharing. In other words, the collective group of agencies needed the ability to deliver the "right information to the right person in the right format at the right time."

In the fall of 2005, Cisco Systems, Inc. and the City of Danville began discussing the possibility of testing a product that addressed the problem of radio interoperability. Cisco Systems had developed an integrated radio solution, which had been tested within smaller single agency venues. Looking for a multi-agency environment for expanded testing, Cisco entered into an agreement with the City of Danville to test their product in a multi-jurisdictional pilot project that would address radio interoperability via an IP network.

The project name is the "Piedmont Regional Voice over IP Pilot Project." The project involves a collaborative effort between Cisco Systems, Inc., Sprint/Nextel, National Institute of Justice CommTech Program, and a multi-agency consortium that includes the City of Danville, VA; Pittsylvania County, VA; Caswell County, N.C.; the Virginia State Police; and the North Carolina State Highway Patrol. Virginia Tech University is a non-participant observer assessing the project to study the future applicability of the technology.

The system is designed to provide connectivity between disparate communication systems where none previously existed. The system does not extend existing networks, but simply allows on-demand connectivity between available resources during emergency or routine situations. For the first time ever, we are utilizing IP protocols to communicate via radio to cell phones and PC devises. We have the capacity to remotely monitor and/or interact with jurisdictional emergency communication traffic…from anywhere in the world where an IP connection exists. The initial system deployment will provide unified voice interoperability using any voice enabled device, but subsequent versions will include data and video integration.

The heart of the system utilizes an IPICS (Internet Protocol Interoperable Communication System) server and a system of routers deployed along the participating agency's radio networks to create IP connectivity. The LMR gateways and routers convert analog radio traffic to IP traffic, mapping each radio channel to an IP Multicast address. Features include multi-level authorization to define and enable individual or group users. Authorized administrative users have the ability to create talk groups over available channels and can limit their level of participation. Enhanced security features provide internal and external security to prevent intrusion by outside attackers.

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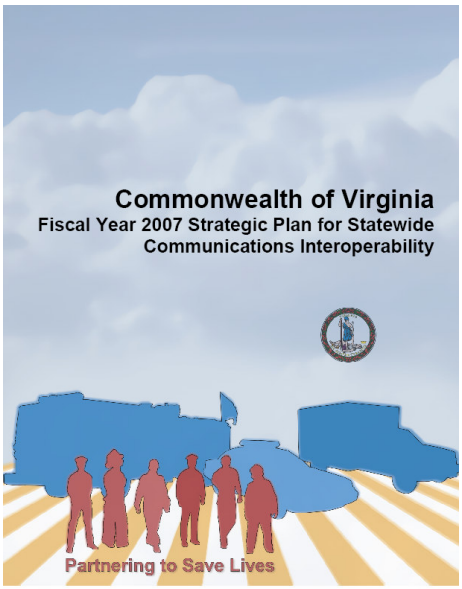
Strategic Plan for Statewide Communications Interoperability



The FY 2007 Strategic Plan for Statewide Communications Interoperability was signed by Governor Kaine in August 2006 and distributed to the participants at the Virginia Interoperable Communications Conference.

The Plan includes 14 initiatives to be implemented by the end of FY07. This year the effort will take a different approach to Initiative Action Teams (IAT). The initiatives requiring IATs will be implemented through a phased approach and results and recommendations will be reported and rolled out on a quarterly basis.

In FY 2007 IATs will be formed for Initiatives 7 (Radio Caches), 9 (VITA IT Infrastructure), 10 (Interoperability Channels) and 14 (Training Exercises). For more information about these initiatives, please refer to the FY 2007 Strategic Plan. Initiatives 7 and 9 will be implemented from October-December 2006 and Initiatives 10 and 14 will be implemented from January-March 2007.

During the October 2, 2006 Advisory Group meeting, an exercise was conducted to determine the needs for each of the four IATs including participation.

For a copy of the Plan or to participate in one of the four IATs, please contact Kerry.Stuver@governor.virginia.gov.

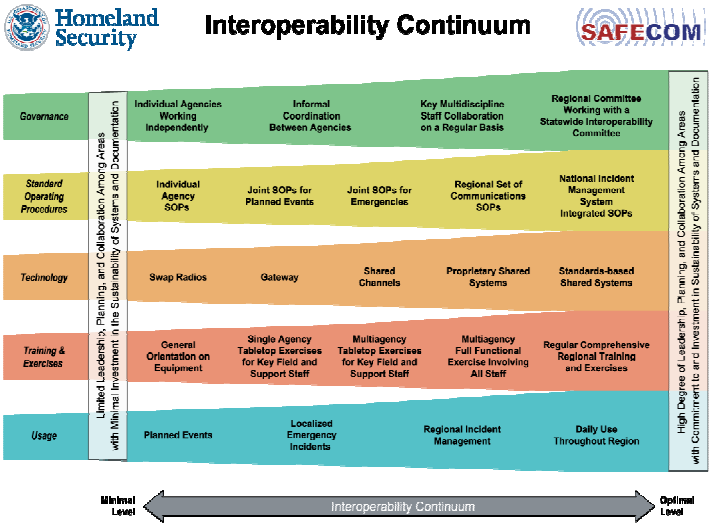
Capabilities Assessment

For the Commonwealth to move towards its 2015 vision of improved communications for all of Virginia's stakeholders, Virginia must develop and implement a clear, cohesive, and comprehensive communications and interoperability plan. To that end, the CICO will perform a capabilities assessment, also known as the baseline study, to obtain a clear understanding of the current capabilities and equipment related to communications and interoperability.

The capabilities assessment has been developed and released by the State Interoperability Executive Committee (SIEC). Some of the key issues that will be assessed in the capabilities assessment include:

- Incompatible and aging communications equipment;
- Limited and fragmented funding and budget cycles amongst multiple agencies;
- Limited and fragmented planning and coordination between agencies both within jurisdictions as well as regionally;
- Problems associated with the availability of adequate capacity and licensing of radio spectrum dedicated to public safety; and
- Limited equipment and programming standards coupled with lack of training.

The resulting baseline will be measured against the



Interoperability Continuum

Interoperability Continuum and updated as the state makes rightward movement on the Continuum.

The RFP to secure a contractor to conduct the capabilities assessment was released on October 17, 2006.

(Local Spotlight con't from p. 5)

The implementation schedule has been defined in a three-phase approach. Phase one seeks to address the issue of operability within the City of Danville. Participants include public safety (police, fire, and EMS) and the Emergency Operations Center (EOC). Also included are the departments of utilities (water, gas, & electric) and public works. Phase II will initially incorporates the law enforcement and emergency services entities from the Counties of Pittsylvania, VA and Caswell, N.C. Phase III will expand the project to incorporate the two adjoining state police agencies; the Virginia State Police and the North Carolina State Highway Patrol.

Looking forward, the project goal is to build a regional platform that supports multi-mediums of communication and various ways to communicate and share information in real-time. The PRIP project is designed to initially bridge disparate radio communication systems. However, our goal is to simply add the capacity to share critical Voice, Data and Video information over a resilient, secure, IP platform.

As for the outcomes, our public safety personnel will be able to access information and interoperate in ways that have yet to be determined. Already, we have discovered a number of new capabilities to interact with other agencies utilizing IP protocols.

This article was authored by Major Ronald D. Hairston (Danville Police Department) with contributions from George Ake (NIJ CommTech Program), and Jeff Frazier (Cisco Systems, Inc.). Major Hairston is the point of contact for the project and can be reached via e-mail at hairsrd@ci.danville.va.us.

Major Dean Hairston joined the Danville Police Department in 1985. He has served in the positions of patrol officer, DARE instructor, detective, special investigator, communications supervisor, records supervisor, Captain of Services, and currently holds the rank of Major as the Services Division Commander. Major Hairston also served eight years on the department SWAT team, work undercover for DEA, and served on a number of federal and state drug and organized crime taskforces.

Common Language

On October 2, 2006, Governor Kaine released a press statement announcing progress in an effort to get Virginia's first responders and public safety personnel to shift to eliminate disparate coded language and move towards the adoption of common language for day-to-day operations and mutual aid events. The common language protocol was formally announced at the 2006 Virginia Interoperable Communications Conference, held October 3-4 in Portsmouth. Virginia will continue to work with stakeholders throughout the state to ensure that Virginia's responders are informed of the transition and are trained on common language protocols.

The protocol calls for the use of plain English for all radio transmissions with the exception of four scenarios that require coded language for responder safety.

Common Language has been endorsed by the Virginia State Police, Virginia Sheriff's Association, Virginia Association of Chiefs of Police, Virginia Fire Chief's Association, Virginia Association of Public-Safety Communications Officials, and Virginia State Firefighters Association. Pocket cards with the accepted coded language for responder safety were distributed at the October 2 Advisory Group meeting and during a breakout session at the conference.

For more information on the common language protocol or to obtain pocket cards, contact the CICO or your organization's representative on the SIEC.

Recent Events

- At the June 28, 2006 SIEC meeting, Chief Charles Werner was voted Chair and Tom Hanson was voted Vice Chair.
- Governor Kaine signed Executive Order 30 to formally establish the SIEC as a Governor's Committee on August 9, 2006.
- Chief Charles Werner, Chair of the SIEC, presented Colonel Steven Flaherty, Superintendent of the Virginia State Police (VSP) with a Certificate of Appreciation for the contribution he and Virginia State Police have made to the interoperability effort.
- Chris Essid, Captain Michael Bolton of STARS, and Captain Eddie Reyes of the Alexandria Police Department, gave a briefing to Virginia's Congressional Delegation staffers on September 14, 2006. The briefing provided an overview of Virginia's statewide interoperability effort, the STARS project, and the efforts of the National Capital Region. The briefing was received well and many attendees wanted to learn more about the interoperability effort.

Col. Flaherty receiving Certificate of Appreciation from Chief Werner.

Announcements

Send Us Your Lessons Learned
The CICO has developed a lessons learned clearinghouse that includes reporting from grantees and information from on-going and existing interoperability projects throughout the Commonwealth. The CICO invites localities to submit their lessons learned to CICO@governor.virginia.gov. Look for the lessons learned clearinghouse and the standardized format for submission on the Interoperability in Virginia website (www.interopreability.virginia.gov) in the upcoming weeks.

New Website Up and Running!
Check out the new Interoperability in Virginia website: www.interoperability.virginia.gov. Send your comments to CICO@governor.virginia.gov.